No. 7700101

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Asgrow Seed Company

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF seventeen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'A4268'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of* Washington *this* 30th *day of* December *in the year of our Lord one thousand nine hundred and* seventy-seven

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture

FORM GR-470
(1-76)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
PLANT VARIETY PROTECTION OFFICE
NATIONAL AGRICULTURAL LIBRARY
BELTSVILLE, MARYLAND 20705

FORM APPROVED
OMB NO. 40-R3712

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

1a. TEMPORARY DESIGNATION OF VARIETY	1b. VARIETY NAME	FOR OFFICIAL USE ONLY	
XP 4268	A 4268	PV NUMBER 7700101	
2. KIND NAME	3. GENUS AND SPECIES NAME	FILING DATE 8-30-77	TIME 3:30 A.M. (P.M)
Soybean	Glycine max	FEE RECEIVED $ 250.00	DATE 8-30-77
4. FAMILY NAME (BOTANICAL)	5. DATE OF DETERMINATION	$ 250.00	8-30-77
Leguminosae	October 1975	$ 250.00	9-30-77

6. NAME OF APPLICANT(S)	7. ADDRESS (*Street and No. or R.F.D. No., City, State, and ZIP Code*)	8. TELEPHONE AREA CODE AND NUMBER
Asgrow Seed Company	Kalamazoo, Michigan 49001	(616) 385-6605

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (*Corporation, partnership, association, etc.*)	10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION	11. DATE OF INCORPORATION
Corporation	Delaware	March 22, 1968

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

John A. Batcha
Asgrow Seed Company
Unit 9630-190-1
7000 Portage Road
Kalamazoo, Michigan 49001

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- [X] 13A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*
- [X] 13B. Exhibit B, Novelty Statement.
- [X] 13C. Exhibit C, Objective Description of the Variety *(Request form from Plant Variety Protection Office.)*
- [ ] 13D. Exhibit D, Additional Description of the Variety.

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? *(See Section 83(a). (If "Yes," answer 14B and 14C below.)* [ ] YES [XX] NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations? [ ] YES [ ] NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed? [ ] FOUNDATION [ ] REGISTERED [ ] CERTIFIED

15. Does the applicant(s) agree to the publication of his/her (their) name(s) and address in the Official Journal? [XX] YES [ ] NO

16. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

August 22, 1977
(DATE)

John A. Batcha
(SIGNATURE OF APPLICANT)
John A. Batcha 00001

(DATE)

(SIGNATURE OF APPLICANT)

INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and $250.00 fee to U.S. Dept. of Agriculture, Agricultural Marketing Service, Grain Division, National Agricultural Library, Beltsville, Maryland 20705. (See Section 180.175 of the regulations and rules of practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

5 Give the date the applicant determined that he had a new variety based on (1) the definition in Section 41(a) of the Act and (2) the date a decision was made to increase the seed.

13a Give (1), the genealogy, including public and commerical varieties, lines, or clones used, and the breeding method. (2), the details of subsequent stages of selection and multiplication. (3), the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4), evidence of stability.

13b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties; (1) identify these varieties and state all differences objectively; (2) Attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.

13c Fill in the Exhibit C, Objective Description form for all characteristics, for which you have adequate data.

13d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe; such as; plant habit, plant color, disease resistance, etc.

14A If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled or published or the certificate has been issued. However, if the applicant specifies "NO", he may change his choice. (See Section 180.15 of the Regulations and Rules of Practice.)

Asgrow Seed Company
Soybean ~~X~~ 4268
A

7700101

EXHIBIT A

Origin and Breeding History of the Variety

1972	Original cross made at Ames, Iowa Parents: Williams x Essex Cross Number: Q327
1972-73 (Fall-Winter)	10 F_1 plants grown at Delray Beach, Fla., under lighted conditions.
1973 (Winter-Spring)	F_2 Bulk Populations grown at Delray Beach, Fla.
1973 (Summer)	F_3 Bulk Populations grown at Ames, Ia., single pod picked from each plant in bulk populations.
1973 (Fall-Winter)	F_4 Bulk Populations of Q327 grown at Delray Beach, Fla., 200 plants were harvested and threshed individually.
1974	200 F_5 progeny rows of cross Q327 were grown at Ames. Row Q327-C75-4268 was selected for its uniformity, pod set, standability and overall desirable characteristics.
1975	Q327-C75-4268 was grown in preliminary yield tests at Ames, Iowa and Oxford, Ind. Q327-C75-4268 was selected for its high yield and other agronomic characteristics. Q327-C75-4268 was found to be uniform in all yield plots and was determined to be a true-breeding variety in October, 1975.
1976	Q327-C75-4268 was evaluated in Advanced Strain IV tests in eight locations across the Midwest. It again was selected for its high yield, standability and overall performance. 28 pounds of Breeders Seed was produced at Oxford. The Breeder seedlot was carefully examined at flowering and maturity for off-types. Less than .2% off-types were found and these were rogued. The Breeder seed of Q327-C75-4268 was sent to Delray Beach, Fla., in October 1976 for seed increase. Two generations of Basic seed was produced in Florida during the fall-winter-spring season of 1976-77. A total of 70 bushel of seed was produced.

8-17-77

The experimental line designation, XP4268, was assigned to Q327-C75-4268.

1977

XP4268 is being produced at four locations in 1977. Approximately five acres are being produced at both West Point, Virginia, and Sikeston, Missouri, and 25 acres at both Crawfordsville, Indiana, and Plainview, Texas.

XP4268 was entered into Advanced Strain Tests at eight locations across the Midwest. It is entered in State Yield Tests in Illinois, Indiana, Ohio and Missouri.

200 plant rows of XP4268 are being grown in Oxford, Indiana, to verify purity.

THE OFFICIAL VARIETY NAME ASSIGNED TO EXPERIMENTAL SOYBEAN VARIETY 'XP 4268' IS 'A 4268' ACCORDING TO JOHN BATEMA'S LETTER OF SEPT. 23, 1977.

RJS 10/5/77

7700101

EXHIBIT B

To our knowledge, the soybean variety that most closely resembles ~~XP~~ A 4268 is Cutler 71. The plant characteristic that differentiates ~~XP~~ A 4268 from Cutler 71 includes but is not restricted to flower color. ~~XP~~ A 4268 has a white flower color while Cutler 71 has a purple flower color.

FORM GR-470-2
(6-15-72)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

EXHIBIT C
(Soybean)

OBJECTIVE DESCRIPTION OF VARIETY

INSTRUCTIONS: *See Reverse.*

SOYBEAN *(GLYCINE MAX)*

NAME OF APPLICANT(S)

Asgrow Seed Company

ADDRESS *(Street and No., or R.F.D. No.; City, State, and ZIP Code)*

Kalamazoo, Michigan 49001

FOR OFFICIAL USE ONLY

PVPO NUMBER 7700101

VARIETY NAME OR TEMPORARY DESIGNATION A 4268

Place the appropriate number that describes the varietal character of this variety in the boxes below.

1. SEED SHAPE: [1] 1 = SPHERICAL 2 = SPHERICAL FLATTENED 3 = ELONGATE 4 = OTHER *(Specify)*

2. SEED COAT COLOR: [1] 1 = YELLOW 2 = GREEN 3 = BROWN 4 = BLACK 5 = OTHER *(Specify)* ____

SHADE: [1] 1 = LIGHT 2 = MEDIUM 3 = DARK

3. SEED COAT LUSTER: [1] 1 = DULL 2 = SHINY

4. SEED SIZE [1 6] GRAMS PER 100 SEEDS

5. HILUM COLOR: [6] 1 = BUFF 2 = YELLOW 3 = BROWN 4 = GRAY 5 = IMPERFECT BLACK 6 = BLACK 7 = OTHER *(Specify)* ____

SHADE: [2] 1 = LIGHT 2 = MEDIUM 3 = DARK

6. COTYLEDON COLOR: [1] 1 = YELLOW 2 = GREEN

7. LEAFLET SIZE *(See Reverse)*: [2] 1 = SMALL 2 = MEDIUM 3 = LARGE

8. LEAFLET SHAPE: [1] 1 = OVATE 2 = OBLONG 3 = LANCEOLATE 4 = ELLIPTICAL 5 = OTHER *(Specify)*

9. LEAF COLOR *(See reverse)*: [3] 1 = LIGHT GREEN 2 = MEDIUM GREEN 3 = DARK GREEN

10. FLOWER COLOR: [1] 1 = WHITE 2 = PURPLE 3 = OTHER *(Specify)* ____

11. POD COLOR: [1] 1 = TAN 2 = BROWN 3 = BLACK

12. POD SET: [2] 1 = SCATTERED 2 = CONCENTRATED

13. PLANT PUBESCENCE COLOR: [2] 1 = GRAY 2 = BROWN 3 = OTHER *(Specify)* ____

SHADE: [2] 1 = LIGHT 2 = MEDIUM 3 = DARK

14. PLANT TYPES *(See Reverse)*: [2] 1 = SLENDER 2 = BUSHY 3 = INTERMEDIATE

15. PLANT HABIT: [2] 1 = DETERMINATE 2 = INDETERMINATE 3 = OTHER *(Specify)* ____

16. HYPOCOTYL COLOR: [1] 1 = GREEN 2 = PURPLE

17. SEED PROTEIN: [ ] 1 = A 2 = B

18. NUMBER OF DAYS TO FLOWERING *(Place a zero in first box (e.g. [0 9]) when days are 9 or less.)* [6 2]

19. MATURITY GROUP: [6] 1 = 00 2 = 0 3 = I 4 = II 5 = III 6 = IV 7 = V 8 = VI 9 = VII 10 = VIII

20. SIZE OF 10 DAY OLD SEEDLING GROWN UNDER CONSTANT LIGHT *(Growth Chamber)* **AT 25° C.** *(Place a zero in first box (e.g. [0 2]) when size is 9 mm. or less.)*

[1 1 4] MM. LENGTH OF SEEDLING

[2 0] MM. LENGTH OF COTYLEDON

[1 0] MM. WIDTH OF COTYLEDON

21. DISEASE: *(Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)*

[0] BACTERIAL PUSTULE	[1] SOYBEAN CYST	[0] DOWNY MILDEW	[0] PURPLE STAIN	[0] POD AND STEM BLIGHT	[0] ROOT KNOT	
[0] FROGEYE	[0] STEM CANKER	[1] PHYTOPHTHORA	[0] BROWN STEM ROT	[0] TARGET SPOT	[0] BROWN SPOT	
[0] BUD BLIGHT	[0] WILDFIRE	[0] RHIZOCTONIA ROT	[ ] OTHER *(Specify)* ____			

8-17-77 00005

FORM GR-470-2 (REVERSE) 7700101 'A4268'

22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant shape	Cutler 71	Petiole angle	Cutler 71
Leaf shape	"	Seed size	"
Leaf color	Essex	Seed shape	"
Leaf surface	Cutler 71	Seedling pigmentation	Williams

23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY:

VARIETY	NO. OF DAYS TO MATURITY	LODGING SCORE	PLANT HEIGHT inches	LEAF SIZE		CONTENT (1)		AVERAGE NO. OF PODS PER PLANT	IODINE NO.
				Width	Length	Protein	Oil		
A4268 Submitted ~~XP4268~~	155	1.6	35	13	10		%	96	
Name of similar variety Cutler 71	157	2.4	44	14	10			82	

(1) Tests being conducted. Information will be furnished when data is available.

INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for completing this form:

1. Scott, Walter O. and Samuel R. Aldrich, 1970, Modern Soybean Production, The Farmer Quarterly.
2. Norman, A. G., 1963, The Soybean: Genetics, Breeding, Physiology, Nutrition, Management.
3. McKie, J. W., and K. L. Anderson, 1970, The Soybean Book.

LEAF COLOR: Nickerson's or any recognized color fan may be used to determine the leaf color of the described variety. The following Soybean varieties may be used as a guide to identify the colors listed on the form.

COLOR	VARIETY
Light Green	"Ada"
Medium Green	"Wilkin"
Dark Green	"Swift"

LEAF SIZE: The following varieties may be used as a guide to identify the relative size leaves.

SIZE	VARIETY
Small	"Amsoy"
Medium	"Bonus"
Large	"Anoka"

PLANT TYPE: The following varieties may be used as a guide to identify the plant type.

TYPE	VARIETY
Slender	"Vansoy"
Intermediate	"Wirth"
Bushy	"Adelphia"